



# UNITED STATES PATENT AND TRADEMARK OFFICE

12C

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,060	11/13/2001	Katherine W. Hughes	SP00-369	3885

22928 7590 06/18/2003

CORNING INCORPORATED  
SP-TI-3-1  
CORNING, NY 14831

EXAMINER
----------

WALSH, BRIAN D

ART UNIT	PAPER NUMBER
----------	--------------

3722

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/008,060

Applicant(s)

HUGHES, KATHERINE W.

Examiner

Brian D. Walsh

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. Applicant's election of group II, claims 12 - 18, in Paper No. 4 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

#### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase: "... non-concentric shaped face on the catalyst substrate" is unclear. After a review of the specification it is has been assumed by the Examiner that the intention of the limitation is to further limit the substrate such that the shape cut onto the face of the substrate has a center point which is not co-axial with the center of the longitudinal axis of the substrate.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 3722

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 12 – 14 and 16 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Swars.

Regarding claim 12, Brown discloses a method of cutting various materials (Col. 1, lines 16 – 17) to length comprising translating a cutting filament (26) inclined to an axis of the workpiece to intersect a portion of the cutting filament with an axis of the workpiece (Col. 2, lines 30 – 37).

Regarding claim 13, Brown discloses locating a first (21) and second (22) guide adjacent the workpiece.

Regarding claim 14, Brown discloses rotating the first guide relative to the second guide.

Regarding claim 16, it is clear from figures 1 and 3 that Brown discloses a closed path system (as defined by Applicant) including a section (generally shown as 26a in figure 3) extending between the first and second guides.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Swars.

Regarding claims 17 and 18, Brown discloses all of the elements as set forth in the above rejections including an apparatus capable of cutting a catalyst substrate into a particular shape, however, Brown fails to disclose a catalyst substrate being cut into a particular shape.

Brown is silent with respect to the specific type of workpiece that can be cut. Swars discloses a catalyst substrate for a catalytic converter which, in figure 4, is held in place by slightly asymmetrical shells. In this cross-sectional view it is clear that the end faces of the

Art Unit: 3722

catalyst substrate would be both asymmetrical and non-concentric with the longitudinal axis of the catalyst substrate.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form an inlet of a catalyst support in the asymmetrical and/or non-coaxial manner taught by Swars using the apparatus and method as taught by Brown since Swars teaches the use of the asymmetrical and non-coaxial structure in combination with the S-shaped layers of the honeycomb structure in order to provide high stability of the internal parts of the honeycomb body as well as to make use of the sufficient free space inherently provided by such a structure. (Col. 9, lines 25 – 30, Col. 9, line 67 – Col. 10, line 5 and Col. 10, lines 15 – 19).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Swars and in further view of Collins.

Brown, as modified by Swars, discloses all of the elements as set forth in the above rejections, however, Brown as modified by Swars fails to disclose a method of cutting including an open path system with a path section extending between first and second guides.

Collins discloses an apparatus and method nearly identical to both Brown and the instant invention including translating a filament on a cutting device between two guides. Collins further discloses a supply spool (100) and a “take-up” spool (102) defining an open path system including a section between the two guides.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the closed loop method of Brown to be an open loop method as taught by Collins since Collins discloses having a feed and ‘take-in’ in opposition to a closed

Art Unit: 3722

system allows for an incremental advance of the cutter filament after each cut while maintaining an axial tension during cutting (Col. 2, lines 35 – 39).

### *Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hamilton, Newman, Retallick, Lee, Frenkel et al. and McDonald et al. all disclose cutting apparatuses or catalytic converters similar to the instant invention.

### *Faxing of Responses to Office Actions*

5. In order to reduce pendency and avoid potential delays, TC 3700 is encouraging FAXing of responses to Office Actions directly into the Group at (703) 872-9302. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the Examiner and art unit at the top of your cover sheet. Papers submitted via FAX into TC 3700 will be promptly forwarded to the Examiner.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Walsh whose telephone number is (703) 605-0638. The examiner can normally be reached on Monday - Friday 7:30 A.M. to 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159. The fax phone numbers for

Art Unit: 3722

the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

*BDW*

BDW

June 12, 2003

*A. L. Wellington*  
A. L. WELLINGTON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700